

WATER FORUM

5. CORRECTIONS AND REVISIONS TO THE DRAFT EIR

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This chapter contains text changes to the WFP Draft EIR subsequent to its publication and public review. The changes are presented in the order in which they appear in the original WFP Draft EIR and are identified by WFP Draft EIR page number. Text deletions are shown in strikeout (~~strikeout~~) and text additions are shown in underline (underline).

SECTION 2, EXECUTIVE SUMMARY

Page 2-61, paragraph 3 is revised as follows:

"... Over the simulated 70-year hydrologic period Shasta Reservoir carryover storage was reduced by about ~~75,000~~ 45,000 AF and flow below Keswick Dam was reduced by about 30,000 AF on an average annual basis. Combined, this represents an approximate average annual deficit of ~~105,000~~ 75,000 AF, relative to the Base Condition. During the 1928 to 1934 critical period, Shasta Reservoir declined an average of ~~75,000~~ 70,000 AF per year, resulting in a total critical period storage deficit of nearly one-half million AF. As a consequence of lower storage, the future cumulative simulation prescribes an average annual reduction in flow volume below Keswick Dam of about 15,000 AF, or about 100,000 AF over the critical period. Combined, the decrease in Shasta Reservoir storage and reduction in flow volume below Keswick Dam represent an annual average water deficit of about ~~90,000~~ 85,000 AF and a total deficit approximating ~~600,000~~ 550,000 AF for the future cumulative critical period, relative to the Base Condition."

Page 2-61, paragraph 4 is revised as follows:

CVP and SWP contract demands associated with future development will be higher than current demands. Even under the Base Condition full demands frequently are not met. One method to generally illustrate the water supply deficit to water contractors under the future cumulative condition is to estimate the amount of water associated with future delivery deficiencies if the same percentage of full demand was delivered in the future as was delivered under the Base Condition. This estimation indicates that during the 70-year hydrologic period simulated, combined CVP/SWP water delivery deficits could exceed 400,000 AF on an annual basis. ~~This estimation indicates that over the 70-year hydrologic period simulated, combined CVP/SWP water delivery deficits could exceed 400,000 AF on an average annual basis.~~ During the 1928 to 1934 critical period, combined CVP/SWP water delivery deficits approach an average of nearly 400,000 AF per year, representing a total critical period deficit of nearly 2½ million AF.

SECTION 3, PROJECT DESCRIPTION

Page 3-13, Table 3-1b is revised as shown on the following page.

Page 3-18, under the City of Sacramento heading, the second full paragraph on is revised as follows:

During periods when the Lower American River flows are sufficient (i.e. above the "Hodge" standard), the City could fully use its increased diversion capacity at FWTP. In drier periods when the Lower American River flows are not sufficient (i.e. below the "Hodge" standard), the City could ~~divert from a new diversion site near the mouth of the American River and pump the water back to FWTP for treatment;~~ use groundwater, or divert and use water from the Sacramento River.

Page 3-33, the following paragraphs are revised as follows:

3.6.13 Roseville/USBR Pumping Plant Expansion

The City of Roseville is proposing the expansion of its raw water pumping plant from 240 cfs (153 mgd) to 400 cfs (259 mgd). ~~Approval of this project is contingent upon USBR approval for the use of federal facilities to convey non-Central Valley Project water. The USBR issued a categorical exemption for the proposed project over a year ago and construction is complete. Currently the facility is in its final testing phase. The USBR contract includes a provision which allows the expanded facility to supply water at a higher rate - CVP water or non-project water. The project is currently in the environmental review phase.~~

3.6.14 Long-term Warren Act Contract, Roseville/USBR

The City of Roseville is negotiating with the USBR for the use of federal facilities to convey non-Central Valley Project water. ~~The City is planning to increase current water purchases under an existing contract with the Placer County Water Agency from approximately 20,000 AF/Yr to approximately 30,000 AF/Yr over a 25-year period. This project is currently in the environmental review phase.~~

Page 3-34, Section 3.6.18 is added as follows:

3.6.18 Project 184

The El Dorado Irrigation District acquired 17,000 AF of water rights via Applications Nos. 29919A, 29920A, 29921A, and 2922A and petition for partial assignment of state-filed Application 5645 before the State Water Resources Control Board. This acquisition is also known as Project 184. Project 184, a hydroelectric facility and system, includes the Forebay Reservoir near Pollock Pines, four mountain lakes (Lake Aloha, Echo Lake, Silver Lake and Caples Lake), the 22-mile El Dorado Canal and the 21-megawatt El Dorado Power Plant in the American River Canyon.

Table 3-1b
1995 and Proposed Year 2030 Surface Water Diversions
for Purveyors That Have Not Concluded Their Negotiations

Water Purveyor	1995 Baseline ¹	2030 Diversion (wet/average years)	2030 Diversion (drier years)	2030 Diversion ² (driest years)
Arcade WD	3,500 AF	11,200 AF	11,200 AF	20,000 3,500 AF
Arden Cordova Water Service	3,500 AF	5,000 AF ³	5,000 AF ⁴	5,000 AF
El Dorado ID	20,000 AF	48,400 AF ³	Decreasing from 48,400 to 38,900 AF ⁴	38,900 AF
Georgetown Divide PUD ⁵	10,000 AF	18,700 AF ³	Decreasing from 18,700 to 12,500 AF ⁴	12,500 AF
Rancho Murieta CSD	0 AF	1,500 AF ⁶	1,500 AF ⁶	0 AF

Note: Assumptions included in these footnotes are for Draft EIR modeling purposes only. Modeling these diversions does not imply there is agreement on these assumptions:

1. Baseline: As it applies to these diversions, Baseline means the historic maximum amount of water that suppliers diverted annually from the American River through the year 1995. Clarifications pertaining to the San Juan Water District, SMUD, and the City of Folsom are noted in footnotes 8, 11, and 19.
2. Driest Years (i.e., Conference Years): Defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre-feet. Conference years are those years which require diverters and others to meet and confer on how best to meet demands and protect the American River.
3. Wet/Average Years: As it applies to these diverters, Wet/Average Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is greater than 950,000 acre-feet.
4. Drier Years: As it applies to these diverters, Drier Years is defined as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 950,000 acre-feet.
5. For this supplier, some or all of their water supply diverted from the American River or Folsom Reservoir in the drier and driest years could be replaced with water released from PCWA's Middle Fork Project Reservoirs by reoperating those reservoirs.
6. As it applies to this diversion, water in Wet/Average and Drier Years is diverted at the mouth of the American River or from the Sacramento River.

Source: CCOMWP 1998.

Page 3-25, the following item is added to the end of Section 3.4.5, Element V: Water Conservation Element:

F. Additional Recommended Best Management Practices. Since preparation of the proposed Water Conservation Element, the California Urban Water Conservation Council has adopted new Best Management Practices which have been incorporated into the statewide Memorandum of Understanding Regarding Urban Water Conservation. The Water Conservation Element is consistent with the new BMPs but does not include new BMPs calling for Wholesale Agency Assistance Programs and High-Efficiency Washing Machine Rebate Programs. It is recommended that in order to mitigate significant and potentially significant impacts related to increased water diversions (see impacts 4.3-1, 4.3-2, 4.4-2, 4.5-2, 4.5-5, 4.5-7, 4.9-1, 4.9-3, 4.9-4, 4.12-1, 6.3-1, 6.3-2, 6.4-2, 6.5-2, 6.5-5, 6.5-7, 6.5-12, 6.5-13, 6.5-16, 6.5-17, 6.7-1, 6.9-1, 6.9-2, and 6.12-1) these new BMPs will be adopted by Water Forum purveyors as follows:

- ▶ Water Forum Purveyors shall implement High-Efficiency Washing Machine Rebate Programs in a manner consistent with Best Management Practice 6 (High-Efficiency Washing Machine Rebate Programs) adopted by the Urban water Conservation Council Effective April 8, 1998. These programs call for establishment of rebate programs where it is cost-effective to do so and where the maximum amount of a cost-effective rebate is not less than \$50.
- ▶ Water forum Purveyors shall implement Wholesale Agency Assistance Programs in a manner consistent with Best Management Practice 10 (Wholesale Agency Assistance Programs) adopted by the Urban Water Conservation Council effective April 8, 1998. These programs call upon wholesale water suppliers to provide their retail customers with varying forms of financial, technical, and programmatic support for water conservation programs.

In 1997 and 1998 several purveyors in the Water Forum participated through the Sacramento Area Water Works Association (SAWWA) in a joint two-year rebate pilot program with the Sacramento Municipal Utility District (SMUD). Under this program SMUD provided \$75 to \$150 per washer and SAWWA provided an additional \$40 per washer. This study concluded that the rebate program did not meet the cost-effectiveness criteria established by the BMP. Accordingly, it may not be feasible to implement rebate programs within the service areas of the purveyors included in the SAWWA study. Pursuant to the recommended mitigation, however, other purveyors not included in the SAWWA study would investigate cost-effectiveness in accordance with the procedure set forth in Urban Water Conservation Council BMP 6 and would implement the rebate programs if cost-effective to do so.

With respect to the Wholesale Agency Assistance Programs, WFP signatories are already committed to supporting only those wholesale deliveries to other purveyors whose customers are already receiving the services provided under each of the Water forum BMPs. For instance, each of the three purveyors receiving wholesale water from the San Juan Water

District each have separately committed to implementing all of the Water Forum Best Management Practices.

The recommended mitigation is incorporated by this reference into the mitigation discussions for impacts 4.3-1, 4.3-2, 4.4-2, 4.5-2, 4.5-5, 4.5-7, 4.9-1, 4.9-3, 4.9-4, 4.12-1, 6.3-1, 6.3-2, 6.4-2, 6.5-2, 6.5-5, 6.5-7, 6.5-12, 6.5-13, 6.5-16, 6.5-17, 6.7-1, 6.9-1, 6.9-2, and 6.12-1.

SECTION 4.2, GROUNDWATER RESOURCES

Page 4.2-2, the text is revised as follows:

The aquifer system in Sacramento County is recharged naturally through three primary processes: 1) deep percolation, 2) stream recharge, and 3) boundary flows. Deep percolation consists of rainfall and irrigation water percolating into unconsolidated substrata. Stream recharge consists of water percolating into the streambed under positive head differences and recharging the underlying aquifer. Boundary flows occur when local and regional groundwater migrate along the gradient of total potential. In Sacramento County, based on a 1990 investigative hydrologic modeling study, the average annual recharge to this groundwater system was approximately 474,000 AF. Of this amount, it was estimated that approximately 45% of the groundwater recharge occurred through river and stream recharge. Deep percolation contributes approximately 35% with boundary flows making up the remaining 20% (SCWA, 1995).

The Sacramento County groundwater basin has been divided into three hydraulically continuous subareas by the county's basin management studies with each area characterized by a cone of depression (SCWA, 1997) (Exhibit 4.2-1):

- ▶ Sacramento North Area (north of the American River)
- ▶ South Sacramento Area (between the American River and Cosumnes River)
- ▶ Galt Area

~~Each area is presently characterized by a cone of depression. Based on 1990 data, the Sacramento North Area has a cone of depression that extends to -60 feet mean sea level (msl), the South Sacramento Area's cone of depression extends to -80 feet msl, and the Galt Area's cone of depression extends to -40 feet msl.~~

To gain more insight into the groundwater conditions in the County, the IGSM was used to simulate the exiting conditions that would be present in the basin, if the current (1990) level of land and water use conditions were to continue during a long-term hydrologic condition.

Based on the results of hydrologic modeling investigation, the Fall 1990 simulated groundwater levels show a cone of depression that extends to -80 feet mean sea level (msl) in

the Sacramento North Area. The modeling study also indicates that in 1990 the South Sacramento Area's cone of depression extends to -80 feet MSL, and the Galt Areas's cone of depression extends to -40 feet msl.

On the other hand, and in contrast to the simulated groundwater levels, the contours of equal groundwater elevation in the Sacramento County are developed based on the groundwater level measurements for the Fall 1996 (Exhibit 4.2-1) indicate that the cones of depression in the Sacramento North, South Sacramento, and Galt areas are at -40 feet, -70 feet, and -50 feet msl, respectively.

Page 4.2-5, the first paragraph under the heading GROUNDWATER LEVEL DECLINE is revised as follows:

Available data indicate that groundwater levels in Sacramento County were fairly stable at an average of 30 feet msl between 1930 and 1940. Between 1941 and 1970, however, the county-wide average groundwater elevations declined to about -5 feet msl (SCWA, 1993). Since 1970, with steadily increasing groundwater pumping, groundwater levels and groundwater storage have declined across Sacramento County and in other counties in the Central Valley. In Sacramento County, starting in the mid-1980s as urban development started replacing agricultural lands, the rate of groundwater decline slowed to the extent that in the wet hydrologic conditions natural recharge was enough to replenish the groundwater pumping. This rate of decline, however, did not hold during the drought of the late 1980s and early 1990s. As the rate of urban expansion increases in the Sacramento Area, the rate of decline in groundwater levels will increase as well. For the Sacramento County groundwater basin, natural groundwater recharge has been unable to maintain equilibrium with pumping; therefore, the basin has not stabilized.

Page 4.2-12, the first paragraph is revised as follows:

With respect to hydrologic condition assumptions, streamflow projections were developed from USBR operations models utilizing the 2020 level of development over the historical 1922-91 hydrologic period. These streamflow projections are based on the projected levels of demands and river diversions in the Sacramento and American rivers. Streamflows in the Sacramento and American rivers are dependent on the operations of the upstream reservoirs, level of water diverted, return flows to the rivers and the operations of upstream reservoirs groundwater accretions along the rivers. On the other hand, ~~T~~ the groundwater levels in large portions of Sacramento County are generally highly dependent on the recharge rates from the rivers (and tributaries), the rivers' stages, and groundwater pumping rates in these areas. ~~As such, if the groundwater pumping does not change substantially, the changes in diversion rates from the rivers will not significantly affect the groundwater. A sensitivity analysis indicated that there is no significant difference in recharge from rivers utilizing the different streamflow projections for the American and Sacramento rivers.~~

Page 4.2-18, the caption on Exhibit 4.2-2 is revised as follows;

Integrated Groundwater - Surface Water Model (IGSM) Results, Showing Areas of Groundwater Level Decline that Induce Groundwater Quality Degradation Impacted by ~~Water Quality Decline Under the Water Forum Proposal~~

SECTION 4.4, WATER QUALITY

Page 4.4-4, the second paragraph is revised as follows:

Past monitoring studies have occasionally shown certain priority pollutants (e.g., trace metals, pesticides) to be at concentrations above State water quality objectives in portions of the Sacramento River (City of Sacramento and City of West Sacramento, 1995). Despite the seasonal variability of many constituents, a recent study revealed that monitored water quality parameters in the vicinity of Freeport (immediately upstream of the SRWWTP's point of discharge) typically met water quality objectives specified in the former Inland Surface Waters Plan (described below), except for some metals (SWRCB, 1994). The principal source of trace metal loading to the Sacramento River is believed to be the Iron Mountain Mine complex, which discharges to the Sacramento River via Spring Creek and Keswick Reservoir. The complex is thought to contribute approximately one-half of the metals loading attributable to mine drainage.

Page 4.4-5, the third paragraph is revised as follows:

Agricultural drainage constituents of concern include nutrients, pesticides/herbicides, suspended solids, dissolved solids and organic carbon (City of Sacramento, 1993). In the 1980s, rice pesticides were responsible for fish kills in agricultural drains ~~and also for taste and odor problems in the water treated at the SRWTP~~. The major fish kills in the Colusa Basin Drain have since been eliminated as a result of the multi-agency rice pesticide control program (City of Sacramento and City of West Sacramento, 1995).

Page 4.4-11, the last paragraph is revised as follows:

The SRWTP was initiated by the SRCSD for the express purpose of addressing water quality issues that are best addressed on a watershed-wide basis rather than an individual point or non-point source basis. An important early task of the watershed program is to design and implement a water quality monitoring program, which has occurred. ~~SRCS participation in this program~~ SRCS is a stakeholder in the SRWTP and as such will contribute to efforts to reduce and control priority pollutant loadings to the Sacramento River and Delta from key point and non-point sources in the watershed.

Page 4.4-14 and page 2-18, Table 2-2, Summary of Project Impacts, Impact 4.4-2 is revised as follows:

Indirect Effect Study Area

Impact
4.4-2

Sacramento River Water Quality: Seasonal Changes to Sacramento River and Delta Water Quality. Implementation of the WFP would result in seasonal reductions in Shasta Reservoir storage and Sacramento River flow during some years. Such hydrologic changes would be expected to cause seasonal elevations in river water temperatures in some years, and could increase concentrations/levels of nutrients, pathogens, TDS, TOC, turbidity, and/or priority pollutants in the Sacramento River due to reduced dilution capacity. Reduced river flows would reduce Delta inflow which, if sufficiently large, could alter various water quality parameters in portions of the Delta. With the possible exception of water temperature (see Section 4.5, Fisheries Resources and Aquatic Habitat, for a discussion of temperature impacts to the Sacramento River), program-level assessments indicated that any direct impacts to Sacramento River or Delta water quality, resulting from seasonal reduction in Sacramento River flow associated with the WFP, would be **potentially significant**. Sacramento River flows at Freeport in some years, thereby reducing the lower river's dilution capacity. In addition, the amount of treated effluent discharged from the SRWTP into the Sacramento River at Freeport would increase substantially. Urban runoff and stormwater discharges would also increase to some degree. Slightly reduced river dilution capacity, coupled with increased constituent loading from urban runoff and stormwater and wastewater discharges would be expected to increase, to some degree, concentrations/levels of nutrients, pathogens, TDS, TOC, turbidity, and/or priority pollutants in the Sacramento River and portions of the Delta. Project-specific water quality mitigation measures are expected to be implemented as urban growth occurs. Moreover, ongoing water quality management plans and programs are expected to prevent State and federal water quality standards, objectives and criteria from being exceeded on a more frequent basis than currently occurs. However, substantial uncertainty exists with regard to seasonal changes in Sacramento River flow, constituent loading, and the extent and effectiveness of project-level water quality mitigation and management measures in the future, all of which are beyond the control of the Water Forum. Because the potential for degradation of Sacramento River water quality in the future depends on uncertain future policy decisions and actions, this would be a **potentially significant impact**.

SECTION 4.5, FISHERIES RESOURCES AND AQUATIC HABITAT

Page 4.5-12, the first paragraph is revised as follows:

Based on laboratory experiments conducted on American shad incubation, Walburg and Nichols (1967) concluded that temperatures suitable for normal egg development ranged from about 54°F to 70°F. These investigators further reported that eggs hatched in 3 to 5 days at 68°F to 74°F and in 4 to 6 days at temperatures of 59°F to 64.4°F. Egg incubation and hatching are coincident with the primary spawning period (i.e., May through June). A large percentage of the eggs spawned in the Lower American River probably do not hatch until they have drifted down river and entered the Sacramento River (CDFG, 1986). Few juvenile American shad have been collected in the Lower American River (CDFG 1980) (Painter et al 1980). Thus, the presence of American shad in the Lower American River is primarily restricted to adult immigration, spawning, and fry lifestages.

SECTION 4.7, POWER SUPPLY

Page 4.7-1, the fourth paragraph is revised as follows:

Power produced by the CVP hydropower system is used first for meeting project water pumping loads, which is deemed "project use power," at CVP pumping facilities (Table 4.7-2). Power surplus to project use is "commercial power" and is marketed by the Western Area Power Administration (WAPA) under long-term firm contracts to municipal and government entities (preference customers) at cost-based rates pursuant to Reclamation Law. In an average year, 4,600 gigawatt hours (GWh) of energy and 1,700,000 kW of capacity are marketed to preference customers at rates that recover full cost of production and repayment obligations of project investment with interest. Energy surplus to CVP project use and preference customer power needs is "banked" under WAPA-PG&E Contract 2948A, to be ~~repaid~~ repurchased by WAPA and its customers. The contractual agreements between WAPA and its customers terminate in 2004, and it is unlikely that the contract will be renewed. WAPA is currently in the process of determining how it will market the CVP hydropower resources surplus to project use power needs once the contract has expired.

Page 4.7-3, the first paragraph is revised as follows:

The Folsom power plant has three generating units, with a total release capacity of approximately 8,600 cfs. ~~By design, the~~ The facility is operated as a peaking facility. Peaking plants schedule the daily water release volume during the peak electrical demand hours to maximize generation at the time of greatest need. At other hours during the day there may be no release (and no generation) from the plant.

Page 4.7-4, the first paragraph is revised as follows:

PUMPING POWER

~~Impacts to pumping power could result from changes in pumping requirements due to changes in the elevation and timing of available water supplies in Folsom Reservoir under the Water Forum Proposal.~~ Impacts to the amount of pumping power required could result from changes in the elevation and timing of available water supplies in Folsom Reservoir under the Water Forum Proposal. Such impacts would be considered significant if average annual pumping energy requirements for purveyors at Folsom Reservoir were to increase over the Base Condition.

*Page 4.7-4, the three paragraphs under the heading **HYDROPOWER IMPACTS FRAMEWORK** are revised as follows:*

Potential hydropower impacts are associated with ~~two quantities,~~ the level of electrical capacity and electrical energy as well as the timing of release of, or any bypassing, of the electrical generation. Reductions in one or both could result from the implementation of the Water Forum Agreement but would have economic consequences for CVP power users in the

form of a reduction in the amount of surplus capacity/energy sales available. These impacts would not be expected to cause direct environmental effects but would have economic consequences for CVP power users in the form of increased capacity/energy purchases to support preference customer loads, or reduced surplus capacity/energy sales. It is quite possible that thermal generation resources, which do emit air pollutants, would supply some portion of the replacement energy. Estimating when, where, and how "dirty" the replacement energy might be, would be speculative and is beyond the scope of this report ability to predict, given the complexity of the interconnection of the electric utility generation in the western United States.

CVP powerplants such as Folsom are part of an integrated generation/pumping system for distribution of water supplies to CVP customers. Hydropower production is a function of reservoir storage and water releases through powerplants. Hydropower consumption by Western Customers is dependent on the level of CVP project use power requirements (primarily pumping). The remaining quantity of CVP hydropower production minus CVP project use provides a measure of capacity and energy by which the alternatives can be compared to a base condition.

Hydropower impacts for this analysis were assessed by comparing changes in monthly values of CVP capacity and energy (CVP production minus losses minus project use) ~~CVP capacity and energy~~ under the WFP, relative to the Base Condition. These changes in values were obtained from the power subroutine of PROSIM for each month of the modeled 69-year hydrologic period of record.

Page 4.7-4, the first paragraph under the heading PUMPING POWER IMPACTS FRAMEWORK is revised as follows:

~~Pumping power impacts are also associated with electrical capacity and electrical energy. The impacts due to the level of pumping power required can be measured as a change in the need for electrical capacity and electrical energy.~~ Reductions in Folsom Reservoir levels caused by the Water Forum Proposal may increase capacity and energy requirements to pump water at the Folsom Pumping Plant and the EID pumping plant at Folsom Reservoir. These impacts, like those for hydropower, would not be expected to cause direct environmental effects, but would have economic consequences and increase the demand for other sources of power.

Page 4.7-4, the footnote is revised as follows:

¹ PROSIM simulates the water years 1922-1991; however, power is normally evaluated on a calendar year basis. ~~Thus,~~ Therefore, while 70 water years (1922-1991) are available for some analysis, only 69 years of data (1922-1991) are available for assessment.

Page 4.7-6, the last paragraph is revised as follows:

Changes in Capacity for Preference Customer Use - Net CVP capacity values for each month of the 69-year hydrologic period of record were obtained from the PROSIM simulations of the Base Condition and the WFP. Net CVP capacity is defined as the capacity available at load center and is calculated as the total CVP generated capacity minus transmission losses minus project use requirements. The minimum monthly net CVP capacity that was observed in the Base Condition was 926 megawatts (Mw), occurring during the month of September. Minimum monthly capacity values and selected statistics for the Base Condition simulation are shown in Table 4.7-4.

Page 4.7-8, the second paragraph is revised as follows:

Reduction in Annual Average CVP Energy Production - CVP powerplants produce energy for project use and commercial sales. Energy production could be reduced by the WFP, causing WAPA to either reduce surplus energy sales or increase energy purchases to meet its commitments. In either case, there is a definable economic cost but an unidentifiable undetermined environmental impact. The environmental impact is associated with the replacement energy produced by dirty sources. These dirty sources are generally identified as thermal powerplants burning some form of hydrocarbon fuel. A comparison of annual net CVP energy available at load center was performed using data from the Base Condition and the WFP. The analysis included the development of graphs, Exhibits 4.7-1 and 4.7-2, at the end of the section, showing the annual net CVP energy for each simulation.

SECTION 4.8, VEGETATION AND WILDLIFE

Pages 4.8-19 and 4.8-20, the footnotes of Tables 4.8-3 and 4.8-4 on are revised as follows:

Page 4.8-19, Table 4.8-3: Revised footnote 3 and 4

³ Number of years during the 70-year record when the mean monthly river flows below Nimbus Dam are between 3,000 and 4,500 cubic feet per second (cfs), which is considered the range for "reasonable" and "healthy" to "maximum" growth of cottonwoods.

⁴ Number of years during the 70-year record when the mean monthly river flows below Nimbus Dam are above 1,765 cfs, which is the minimum flow range for "healthy" growth maintenance of cottonwoods.

Page 4.8-20, Table 4.8-4: Revised footnote 3 and 4..

³ Number of years during the 70-year record when the mean monthly river flows below the H Street bridge are between 3,000 and 4,500 cubic feet per second (cfs), which is considered the range for "reasonable" and "healthy" to "maximum" growth of cottonwoods.

⁴ Number of years during the 70-year record when the mean monthly river flows below the H Street bridge are above 1,765 cfs, which is the minimum flow range for "healthy" growth "maintenance" of cottonwoods.

Table K-1 (flows from Nimbus Dam) and Table K-2 (flows at the H Street Bridge) are added to the Draft EIR.

Table K-I
WFP Impact on Riparian Vegetation in the Lower American River Below Nimbus Dam

Month ¹	Modeled Scenario	Number of Years of 70-year Record Within Specified Ranges ²		% of Years Above Minimum Flow Range ⁵
		# Years in Reasonable to Max Flow Range ³ (3,000-4,500 cfs)	# Years Above Minimum Flow Range ⁴ (2,000 cfs)	
March	Base	18	57	81%
	WFP	19	54	77%
April	Base	16	60	86%
	WFP	15	57	81%
May	Base	24	60	86%
	WFP	26	59	84%
June	Base	21	57	81%
	WFP	23	54	77%
July	Base	25	50	71%
	WFP	17	44	63%
August	Base	27	49	70%
	WFP	28	43	61%
September	Base	21	39	56%
	WFP	19	31	44%
October	Base	2	46	66%
	WFP	1	43	61%

¹ The period from March through October is considered the cottonwood growing season.

² Number of years during the 70-year record when the mean monthly river flows are within the specified ranges for cottonwoods.

³ Number of years during the 70-year record when the mean monthly river flows below Nimbus Dam are between 3,000 and 4,500 cubic feet per second (cfs), which is considered the range for "reasonable" to "maximum" radial growth of cottonwoods.

⁴ Number of years during the 70-year record when the mean monthly flows below Nimbus Dam are above 2,000 cfs, which is the minimum flow required to assure some cottonwood growth.

⁵ Percentage of years during the 70-year record when river flows are above the minimum flow range to assure some cottonwood growth (2,000 cfs).

Base Modeled predictions of 70-year record based on 1998 diversions and operating rules.

WFP Modeled predictions of 70-year record based on WFP conditions.

Source: EDAW, 1999.

Table K-2
WFP Impact on Riparian Vegetation in the Lower American River at H Street Bridge

Month ¹	Modeled Scenario	Number of Years of 70-year Record Within Specified Ranges ²		% of Years Above Minimum Flow Range ⁵
		# Years in Optimal Flow Range ³ (3,000-4,500 cfs)	# Years Above Minimum Flow Range ⁴ (1,765 cfs)	
March	Base	20	50	71%
	WFP	19	47	67%
April	Base	19	51	72%
	WFP	17	47	67%
May	Base	25	59	84%
	WFP	27	58	83%
June	Base	21	55	79%
	WFP	21	49	70%
July	Base	21	50	71%
	WFP	10	38	54%
August	Base	30	46	66%
	WFP	18	39	56%
September	Base	21	32	46%
	WFP	19	26	37%
October	Base	2	42	60%
	WFP	1	36	51%

¹ The period from March through October is considered the cottonwood growing season.

² Number of years during the 70-year record when the mean monthly river flows are within the specified ranges for cottonwoods.

³ Number of years during the 70-year record when the mean monthly river flows below the H Street bridge are between 3,000 and 4,500 cubic feet per second (cfs), which is considered the range for "reasonable" to maximum" radial growth of cottonwoods.

⁴ Number of years during the 70-year record when the mean monthly river flows below the H Street bridge are above 2,000 cfs, which is the minimum flow required to assume some cottonwood growth.

⁵ Percentage of years during the 70-year record when river flows are above the minimum flow range to assure some cottonwood growth (2,000 cfs).

Base Modeled predictions of 70-year record based on 1998 diversions and operating rules.

WFP Modeled predictions of 70-year record based on WFP conditions.

n/c No change between Base and WFP conditions.

Source: EDAW, 1999.

SECTION 4.9, RECREATION

Page 4.9-54, the following information is added to the end of the section.

Summary

Water Forum signatories will work with their elected officials, CDPR and other agencies that have an interest in reservoir levels, such as Congress, USBR, California Department of Boating and Waterways and the Sacramento Area Flood Control Agency, to obtain at least \$3,000,000 of new funding for improvements to Folsom Reservoir recreation facilities.¹

Background

Historically, many Water Forum purveyors secured water rights prior to the construction of the Folsom Reservoir. After construction of the reservoir, USBR assumed responsibility for operating the reservoir to store and manage water for the operation of the CVP, among other purposes. The reservoir has historically held and released to CVP customers water that Water Forum purveyors were entitled to but had not diverted. As purveyors increase diversions in accordance with historic entitlements, the manner in which USBR operates the reservoir together with flood control operations will influence reservoir levels. For these reasons and because CEQA defines "impacts" and "effects" as "direct or primary effects which are *caused* by the project" (14 Cal. Code Regs. § 15358), some purveyors believe that reservoir declines are properly viewed as being caused by the lack of replacement water supplies for the Central Valley Project as senior water rights are exercised and CVP yield is required to be used for environmental purposes. Accordingly, these purveyors believe that CEQA mitigation for reservoir impacts is not a legally required purveyor responsibility. As described below, however, the Water Forum project will include measures that will tend to lessen the effect of the reduction in Folsom Reservoir levels that would occur in the future.

As noted in the DEIR, the Water Forum project includes measures that limit the extent of reservoir reductions by restricting diversions in dry years and imposing more extensive water conservation measures than would occur in the absence of the Water Forum Agreement. To help offset the effects of reservoir reductions that do occur, the Water Forum will work with other agencies that have an interest in reservoir levels, such as Congress, USBR, California Department of Boating and Waterways, and Sacramento Area Flood Control Agency, to obtain at least \$3,000,000 of new funds for improvements to Folsom Reservoir recreation facilities. The CDPR is the agency responsible for managing the resources of Folsom Reservoir. Therefore, it is the appropriate agency to receive these funds and manage the recreational improvement projects.

The CDPR will develop a list of potential recreation improvement projects as part of the funding request. One type of project could be "mini-dikes," i.e., sculpted embankments

¹ New funding means funding Water Forum signatories are instrumental in obtaining that was not authorized, appropriated, or requested as of January 1, 2000.

within the lake bed to impound water for swimming use when reservoir levels are low. The design of the recreational improvements in the lake would also include design features for improving warm water fishery habitat, such as structural complexity for fish on the lake side of the mini-dike embankment, which would also support recreational fishing. Other projects could include, but are not limited to, those identified in the Draft EIR. The improvements are intended to help mitigate the anticipated loss of visitor days.

The USBR will contribute separate funding for an update by CDPR of the Folsom Lake State Recreation Area General Plan.

SECTION 4.10, LAND USE AND GROWTH-INDUCING IMPACTS

Page 4.10-28, Table 4.10-4 was omitted from the Draft EIR. The table is revised and is included at the end of this section.

SECTION 5, ALTERNATIVES

Page 5-6, the first paragraph is revised as follows:

City of Roseville

The City of Roseville has rights to the tertiary treated effluent from the Regional Wastewater Treatment Plant on Booth Road in Roseville. Planned capacity of the treatment plant is 54 million gallons per day (mgd) and a portion of the reclaimed water is currently used in Roseville's existing reclaimed water system. ~~Roseville considered a project to replace its consumptive use of American River water. The project would involve construction of a pumping and conveyance system to transport up to 40,000 AF of reclaimed water upstream to be discharged to the American River at a point upstream of Nimbus Dam (Whithead, pers. comm., 1997). The Roseville project is inconsistent with existing Regional Water Quality Control Board (RWQCB) standards for the Lower American River, and is considered a low-priority project in the near term (3 to 5 years). Roseville is no longer considering a discharge to the American River.~~

SECTION 6, CUMULATIVE IMPACTS

Page 6-32, Impact 6.8-2 and the discussion are revised as follows. The same change is made on page 2-37 of Table 2-2, Summary of Project Impacts.

Impact
6.8-2

Special Status Species and Riparian Vegetation Associated with the Sacramento River and Sacramento-San Joaquin Delta. Under the set of assumptions for future conditions used in the EIR, the cumulative impact analysis indicates that flows in the lower American River would be further reduced. However, during the critical growing season months of ~~April~~ March through July, the number of occurrences in which mean monthly flows of the lower American River would be within the minimum/optimal flow range of 1,300 to 4,000 cfs would vary by 3 or fewer years during the 70-year period of record, in comparison

to base conditions. As a result, reduced flows under future cumulative conditions would not result in an adverse effect to the special-status species (including the Valley Elderberry Longhorn Beetle) that are dependent on riparian vegetation and backwater ponds associated with the Lower American River. This would be a **less-than-significant** future cumulative impact.

Based on the future cumulative scenario evaluated for 2030, additional diversions and potential CVP operations would result in decreases in Sacramento River mean monthly flows. Compared to base conditions, average mean monthly flows of the Sacramento River would be reduced by approximately 3% (320 cfs), during the critical growing season months (~~April~~ March - July). During the remaining months of the growing season (August - October) flows would be reduced, on average, by approximately 2% (170 cfs). As a result, mean monthly flows would not be reduced with sufficient magnitude and frequency to significantly alter existing riparian vegetation dependent on Sacramento River flows and Delta inflows. Because riparian vegetation would not be adversely affected and open water (river) habitat would be available, the special-status species dependent on such habitat would not be adversely affected. This would be a less-than-significant future cumulative impact.

Page 6-33, Impact 6.8-3 and the following discussion are revised as follows. The same change is made on page 2-38 of Table 2-2, Summary of Project Impacts

Impact
6.8-3

Vegetation Associated with Reservoirs. Under the set of assumptions for future conditions used in the EIR, the cumulative impact analysis indicates that, in comparison to base conditions, mean monthly surface water elevations at Folsom, Shasta, and Trinity reservoirs would be reduced by less than 1% during the months of the growing season (March-October). Because the draw down zones at these reservoirs are vegetated with non-native plants that do not form a contiguous riparian community, minor fluctuations in surface water elevations would not adversely affect important habitat values at these reservoirs. Consequently, this would be a **less-than-significant future cumulative impact**.

Based on the future cumulative scenario, additional diversions and potential CVP operations would result in more frequent declines in the water surface elevation of Folsom, Shasta, and Trinity reservoirs. However, during the months of the growing season (March-October) mean monthly surface water elevations at Folsom, Shasta, and Trinity reservoirs would be reduced by less than 1%. Compared to base conditions, future month-end surface water elevations would be reduced by approximately ~~3~~ 4 feet at Folsom and Shasta reservoirs and by approximately ~~6~~ 8 feet at Trinity Reservoir. Because the draw down zones at these reservoirs are vegetated with non-native plants that do not form a contiguous riparian community, minor fluctuations in surface water elevations would not adversely affect important habitat values at these reservoirs. In addition, Keswick and Whiskeytown Reservoirs would continue to operate as regulating reservoirs for the larger upstream dams, so their pattern of elevation changes would not change under future cumulative conditions. This would be considered a less-than-significant cumulative impact.

Page 6-34, Impact 6.9-3 and the following discussion are revised as follows. The same change is made on page 2-43 of Table 2-2, Summary of Project Impacts

Impact
6.9-3

Sacramento River and Sacramento-San Joaquin Delta Recreation Opportunities Under Future Cumulative Conditions. Under the set of assumptions for future conditions used in the EIR, the cumulative impact analysis indicates that during the critical growing recreation season months of April through July mean monthly flows in the Sacramento River would be reduced by approximately 3%, in comparison to base conditions. Flows would not be reduced with sufficient magnitude and frequency to adversely affect recreational opportunities associated with the Sacramento River and Sacramento-San Joaquin Delta. This would be a **less-than-significant future cumulative impact.**

Page 6-37, Impact 6.11-1 discussion is revised as follows:

~~Based on the future cumulative scenario evaluated for 2030, additional diversions and potential CVP operations would result in decreases in Lower American River mean monthly flows. Compared to base conditions, the number of occurrences in which mean monthly flows of the Lower American River would be reduced below the minimum threshold necessary for the maintenance of riparian vegetation (1,765 cfs) would increase by approximately 20% or more, during the critical growing season months (April - July). In addition, the number of occurrences in which future mean monthly flows would be reduced below the minimum threshold necessary for backwater pond recharge (1,300 cfs) would increase by more than 30%. Reduced flows under future cumulative conditions could result in an adverse effect to riparian vegetation and backwater ponds within the Lower American River corridor. Because discernible aesthetic impacts along river corridors are primarily associated with adverse impacts to localized vegetation, the aesthetic quality of the Lower American River, under future cumulative conditions, could be adversely affected. Because the WFP would contribute to this cumulative impact, this would be a significant future cumulative impact.~~

Under the set of assumptions for future conditions used in the EIR, the cumulative impact analysis indicates that flows in the lower American River would be further reduced. However, during the critical growing season months of April through July, the number of occurrences in which mean monthly flows of the lower American River would be within the minimum/optimal flow range of 1,300 to 4,000 cfs would vary by 3 or fewer years during the 70-year period of record, in comparison to base conditions. As a result, reduced flows under future cumulative conditions would not result in an adverse effect to the special-status species (including the Valley Elderberry Longhorn Beetle) that are dependent on riparian vegetation and backwater ponds associated with Lower American River. This would be a less-than-significant future cumulative impact.

SECTION 8, GLOSSARY AND LIST OF ACRONYMS

The following acronym is added to the Draft EIR.

SRCSD.....Sacramento Regional County Sanitation District

SECTION 9, REFERENCES AND PERSONAL COMMUNICATIONS

The following references are added to the Draft EIR.

CDFG. 1979. Project AFS-17, American Shad Study. Final Report, Job Number 5: American Shad Management Plan for the Sacramento River Drainage. State of California Department of Fish and Game. Anadromous Fish Conservation Act.

Department of Water Resources. 1998. The California Water Plan Update, Bulletin 160-98. January 1998.

King, Jon R. 1999. Assessment of Wintering Bald Eagles at Folsom Reservoir, California. Point Reyes Bird Observatory

Snider, B., R. Titus and B. Payne. 1998. Lower American River Emigration Survey: October 1995-September 1996. California Department of Fish and Game, Environmental Services Division, Stream Evaluation Program. September 1998.

**Table 4.10-4
General Plan Policies Consistency Analysis**

General Plan Element	General Plan Policies	Consistency
Sacramento County General Plan		
Conservation Element, Growth and Water Supply	CO-1 Long range plans for accommodating population and economic growth shall not be based on the assumption of additional supplies from future storage facilities on the Sacramento, American, or Cosumnes River unless the projects are approved and funding secured.	<u>Consistent.</u> The County of Sacramento, through participation in the Water Forum Agreement, is conducting long-range water supply planning efforts to implement surface water diversions, water conservation strategies, and ground water management systems to accommodate future population and economic growth.
Sacramento County General Plan		
Conservation Element, Future Water Supplies	CO-3 SCWA shall continue to work with the area water purveyors to develop a conjunctive use program and assist other purveyors in obtaining surface water necessary to implement conjunctive use.	<u>Consistent.</u> Conjunctive use, the planned management and use of both ground and surface water to improve the overall reliability of total water supply, is a component of the Groundwater Management Element of the Water Forum Agreement.
Conservation Element, American River Flows	CO-7 Divert surface water only when flows are sufficient to maintain minimum flows consistent with the EBMUD Court ruling of: 2,000 cfs October 16 through February 3,000 cfs March through June 1,750 cfs July through October 15 in the lower American River between Nimbus Dam and its confluence with the Sacramento River.	<u>Consistent.</u> The Water Forum Agreement does not include American River diversions for Sacramento County; rather, they will come from the Sacramento River, when surface water is needed. Therefore, Sacramento County water needs would not affect achievement of the "Hodge decision" objectives.
	CO-18 Work with area purveyors to investigate and implement a conjunctive use program between groundwater and surface water supplies., consistent with meeting the in-stream flow requirements of the American River.	<u>Consistent.</u> The Water Forum process is intended to provide a reliable and safe water supply and preserves the values of the Lower American River by a conjunctive use program and other means. The Water Forum Agreement would directly support compliance with this policy.
Conservation Element, Growth and Ground Water	CO-19 Utilize intermittent water in conjunctive use with groundwater in agricultural areas.	<u>Consistent.</u> The Water Forum Agreement specifies that conjunctive use be used as a means of managing sustainable yield in groundwater resources for agricultural and other land uses.

**Table 4.10-4
General Plan Policies Consistency Analysis**

General Plan Element	General Plan Policies	Consistency
City of Sacramento General Plan		
Conservation and Open Space Element, Preservation of Natural Resources	C-2 Encourage the State Department of Fish and Game to retain and enhance the fish communities in the area's waterways.	<u>Consistent.</u> The Water Forum Agreement addresses the issue of fish communities in detail and staff and stakeholders have coordinated with the California Department of Fish and Game through the Lower American River Technical Team relative to the Habitat Management Element.
Conservation and Open Space Element, Outdoor Recreation	A-1 Implement the goals and policies of the 1986 American River Parkway Plan.	<u>Consistent.</u> Policy 3.1 of the Parkway Plan addresses establishing flow standards to protect the value of the parkway. The WFA Successor Effort will seek such standards in its implementation of the Agreement.
Public Facilities and Services Element, Water	A-1 Develop and adopt a comprehensive water policy for the City of Sacramento that is consistent with a long range adopted plan.	<u>Consistent.</u> Through the City of Sacramento's participation in the Water Forum Agreement, it would agree to a long-range plan for diversion of surface water from the American River during wet/average years, drier years, and driest years. It would also agree to the other elements established in the Agreement.
City of Folsom General Plan		
Open Space and Conservation Element	28.1 The City of Folsom should adopt water conservation measures which reduce water consumption by user type.	<u>Consistent.</u> The City of Folsom, upon signing the Water Forum Agreement, would be committing to implement water conservation measures as identified in the Water Conservation Element. These measures include a variety of Best Management Practices.
	28.3 The City of Folsom should maintain existing and develop new sources of water to ensure adequate, long-term and high quality water supplies.	<u>Consistent.</u> As a stakeholder in the Water Forum, the City of Folsom is participating in long-term water planning to identify a reliable and safe water supply to accommodate anticipated future growth.

**Table 4.10-4
General Plan Policies Consistency Analysis**

General Plan Element	General Plan Policies	Consistency
City of Galt General Plan		
Public Facilities/Services Element, Water	3. The City of Galt shall continue to assure the provision of necessary water services for the community.	<u>Consistent</u> . A primary objective of the Water Forum Agreement is the provision of access to a safe and reliable water supply. As a stakeholder in the Water Forum process, the City of Galt is contributing to the overall water planning process. Water Forum stakeholders recognize that regional participation is necessary to ensure that sustainable yields remain in groundwater supplies relied upon by communities such as Galt.
	5. The City should promote water conservation by City water users.	<u>Consistent</u> . As a stakeholder in the Water Forum Agreement, the City of Galt would agree to implement the Water Conservation BMPs as identified in the Water Conservation Element of the Agreement.
Placer County General Plan		
Public Facilities and Services Element, Water Supply and Delivery	4.C.3 Placer County shall encourage water purveyors to require that all new water services be metered.	<u>Consistent</u> . One of the Best Management Practices (BMPs) of the Water Conservation Element is a Residential Meter Retrofit (BMP#4), along with Conservation Pricing (BMPA#11).
	4.C.6 Placer County shall promote efficient water use and reduced water demand by: a) Requiring water-conserving design and equipment in new construction; b) Encouraging water-conserving landscaping and other conservation measures; c) Encouraging retrofitting existing development with water-conserving devices; and d) Encouraging water-conserving agricultural irrigation practices.	<u>Consistent</u> . The Water Forum Agreement contains a Water Conservation Element for the implementation of a variety of Best Management Practices (BMPs). This Element contains the framework for specific conservation measures to be implemented by each of the participating purveyors.

**Table 4.10-4
General Plan Policies Consistency Analysis**

General Plan Element	General Plan Policies	Consistency
City of Roseville General Plan		
Open Space and Conservation Element, Water Resources, Groundwater Recharge, and Water Quality	4. Continue to monitor and participate in, as appropriate, regional activities affecting water resources, groundwater and water quality.	<u>Consistent.</u> As a stakeholder in the Water Forum process, the City of Roseville is actively participating in the long-term regional planning for safe and reliable water supplies through the year 2030.
Public Facilities Element, Water System	1. Secure sufficient sources of water to meet the needs of the existing community and planned growth.	<u>Consistent.</u> Through participation in the Water Forum Agreement, the City of Roseville is providing long-term planning and management of water resources to meet the City's needs through year 2030.
	8. Develop and pursue alternatives to permit delivery of PCWA water to Roseville.	<u>Consistent.</u> The Water Forum Agreement identifies "Major Water Supply Projects That Will Receive Water Forum Support Upon Signing the Water Forum Agreement." Projects included in the agreement would allow for the delivery of PCWA water to Roseville.
City of Roseville General Plan		
	10. Develop and implement water conservation standards and measures as necessary elements of the water system.	<u>Consistent.</u> The City of Folsom, upon signing the Water Forum Agreement, would be committing to implement water conservation measures as identified in the Water Conservation Element. These measures include a variety of Best Management Practices.
<p>¹ General Plans (and related topics) are presented for those stakeholder jurisdictions located within the Water Service Study Area as defined in Section 3, Project Description.</p> <p>² This table presents only those policies deemed to be primarily related to water supply and the protection/conservation of surface water resources. Additional policies (such as those related to the financing of water improvements, surface water quality, or stormwater drainage, and general protection of riparian habitat) are not included in this table. Please refer to applicable General Plans for additional water-related policies.</p> <p>Sources: Sacramento County General Plan, 1993; City of Sacramento General Plan, 1988; City of Folsom General Plan, 1993; Galt General Plan, 1990; Placer County General Plan, 1994; City of Roseville General Plan, 1992.</p>		